

A CIRCUIT ARRANGEMENT AND A METHOD TO TRANSFER DATA ON A 3-LEVEL PULSE AMPLITUDE MODULATION (PAM-3) CHANNEL

ABSTRACT OF THE DISCLOSURE

A mobile station (10) includes a plurality of sub-assemblies coupled together by a plurality of data communication buses (22) connected to ports (20). At least one port includes a Multi-level Analog Signaling (MAS) circuit arrangement that includes a transmitter to encode data bits represented by multi-level analog signals. A data communications bus that couples the transmitter to a receiver in another port includes at least two multi-level, possibly differential signal buses for conveying the encoded data bits such that, on each multi-level signal bus, during each data bit period the signal level is required to change from a first signal level to a second, different signal level. The transmitter indicates a data boundary, such as the beginning or the end of multi-bit frame, to the receiver by holding one of the multi-level signal buses of the at least two signal buses at the same level for at least two consecutive bit periods.